

Two main Boilers for Standard Engines Blair & Co. 1899

Indb No 10380.

Rpt. 5a.

# REPORT ON BOILERS.

No. 71371

Received at London Office WELLS 29 OCT 1918  
NEWCASTLE-ON-TYNE

Date of writing Report 28<sup>th</sup> Oct 1918 When handed in at Local Office 29 OCT 1918 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Newcastle Date, First Survey 2<sup>nd</sup> Dec 1914 Last Survey 191  
Reg. Book. on the (Number of Visits) Tons } Gross } Net }

Master Built at Stockton By whom built Richardson Tuck & Co When built  
Engines made at Stockton By whom made Blair & Co No 1899 When made  
Boilers made at Newcastle By whom made Wallsend Slipway & Eng Co 312B When made 1918  
Registered Horse Power Owners Port belonging to

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY—Manufacturers of Steel Schuttly & Co & J. Spence & Co

(Letter for record S) Total Heating Surface of Boilers 6204 sq ft Is forced draft fitted yes No. and Description of Boilers Two, single-ended Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 25.10.18

No. of Certificate 9173 Can each boiler be worked separately Area of fire grate in each boiler 762 sq ft No. and Description of safety valves to each boiler 1 Pair Spring Area of each valve 11 sq in Pressure to which they are adjusted  
Are they fitted with easing gear In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork 11' 6" Mean dia. of boilers 16' 6" Length 11' 6"

Material of shell plates Steel Thickness 1 15/32" Range of tensile strength 29 1/2 - 33 1/2 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams 8 Lap long. seams JBS. J. Rivd. Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10 1/4"  
Lap of plates or width of butt straps 22 1/4" Per centages of strength of longitudinal joint rivets 87.3 Working pressure of shell by plate 85.36

rules 214 lbs Size of manhole in shell 16" x 12" Size of compensating ring McNeill No. and Description of Furnaces in each boiler 4 - Morrison's Material Steel Outside diameter 45 1/8" Length of plain part top 19" Thickness of plates bottom 32"

Description of longitudinal joint Welded No. of strengthening rings 1 Working pressure of furnace by the rules 209 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/16" Back 21/32" Top 11/16" Bottom 1 3/32" Pitch of stays to ditto: Sides 9 5/8" x 7 7/8" Back 8 3/8" x 8 3/8"

Top 9 1/16" x 8 3/8" stays are fitted with nuts or riveted heads nuts Working pressure by rules 212 lbs Material of stays Steel Diameter at smallest part 2.03" Area supported by each stay 77 sq in Working pressure by rules 237 lbs End plates in steam space: Material Steel Thickness 1 5/16"

Pitch of stays 20 3/8" x 18 1/4" How are stays secured S. N. Working pressure by rules 214 lbs Material of stays Steel Diameter at smallest part 2.07"

Area supported by each stay 346 sq in Working pressure by rules 211 lbs Material of Front plates at bottom Steel Thickness 15/16" Material of Lower back plate Steel Thickness 31/32" Greatest pitch of stays 14 5/8" Working pressure of plate by rules 230 lbs Diameter of tubes 2 1/2"

Pitch of tubes 3 3/4" x 3 23/32" Material of tube plates Steel Thickness: Front 1" Back 25/32" Mean pitch of stays 7 15/32" Pitch across wide water spaces 14" Working pressures by rules 209 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 1/8" x 1 1/2" Length as per rule 29 7/16" Distance apart 8 3/8" Number and pitch of Stays in each 2 - 9 3/16"

Working pressure by rules 207 lbs Superheater or Steam chest: how connected to boiler None Can the superheater be shut off and the boiler worked separately yes Diameter yes Length yes Thickness of shell plates yes Material yes Description of longitudinal joint yes Diam. of rivet holes yes Pitch of rivets yes Working pressure of shell by rules yes Diameter of flue yes Material of flue plates yes Thickness yes

If stiffened with rings yes Distance between rings yes Working pressure by rules yes End plates: Thickness yes How stayed yes

Working pressure of end plates yes Area of safety valves to superheater yes Are they fitted with easing gear yes

FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED

The foregoing is a correct description, Manufacturer.

Dates of Survey while building: During progress of work in shops: 1914 Jan 15, Feb 15, 19, Mar 9, Apr 29, May 6, Jun 22, Aug 12, Sep 20, Oct 26, Nov 17, 1915 Jan 12, Feb 19, Mar 26, Apr 12, May 12, Jun 20, Jul 24, Aug 11, 1916 Jan 11, 17, 19, 24, Feb 1, 4, 12, Jul 24, Aug 9, 16, Sep 10, 24, 27, Oct 2, 3, 8, 9, 14, 17. Total No. of visits 43

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These main boilers have been constructed under special survey & the materials & workmanship are found good.

Survey Fee £ 20 Travelling Expenses (if any) £ See accompanying Machinery report

Thomas Field Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. 27. MAY. 1918 Assigned See accompanying report Indb No 10380

